

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET
(pursuant to NAC 445A.236)

Permittee Name: Richard Sorani
P. O. Box 1030
Lovelock, NV 89419

Permit Number: NV0023493

Location: Former Unocal Station
810 Cornell Avenue
Lovelock, Pershing County, Nevada 89419

Latitude: 40° 10' 42" N
Longitude: 118° 28' 33" W
Township 27N, Range 31E, Section 26

General:

The former Unocal fuel station site, located at 810 Cornell Avenue, Lovelock, and owned by Richard Sorani, is the site of groundwater contamination due to a leaking underground storage tank. Nevada Division of Environmental Protection (NDEP) has required removal of the tank and remediation of the hydrocarbon contaminated groundwater.

The NPDES permit application requested construction of a remediation system comprised of the following components. Impacted groundwater is extracted from two (2) on-site wells (GEW1 and GEW2), and is pumped to an oil-water separator tank (OWS), equipped with a high level shut-off switch. A transfer pump transfers water from the OWS to a Chemical Feed Pod (CFP), where the extracted water is dosed with a sequestering agent to aid in treatment. The water is then transferred through an air stripper which vents volatiles to the atmosphere. The stripped fluid is then transferred through a filter and through two vessels (in series) containing granular activated carbon. The treated water is discharged to a stormdrain located adjacent to the site. The stormdrain discharges to the Lovelock Drain, which ultimately discharges to the Toulon Sink. The permit was issued on July 1, 2006, with a permit limit of 0.05 MGD.

During operation of the system, it was quickly discovered that an additional well (GEW-3) and higher pumping rates were required to increase the capture zone of the groundwater extraction wells, thereby increasing the rate of groundwater remediation. An additional treatment train was proposed to treat water extracted from this well, consisting of a sediment filter, equalization tank and three (3) granular activated carbon (GAC) absorption vessels. The Permittee submitted an application for, and was issued, a temporary permit (TNEV2007356) allowing the construction and operation of the required well and treatment system, with a permitted flow-rate of 0.10 MGD. Permit TNEV2007356 was issued in November 2006. This fact sheet is for the modification of the original permit to reflect the higher flow-rate and additional permit requirements. Permit NV0023493 shall expire on June 30, 2011.

Discharge Flow and Characteristics

The original treatment facility was constructed and operated under temporary permit TNEV2005436. The monitoring required under the original temporary permit and the more recent temporary permit TNEV2007356 yielded the following discharge characteristics.

MONITORING PARAMETERS AND LIMITS			AVERAGE ANALYTICAL RESULTS	
Parameter	Temporary Permit Limits			
	TNEV2005436	TNEV2007356		
Flow Rate (MGD)	0.03	0.100	0.0196	0.0655
Total Petroleum Hydrocarbons Extractable (mg/l) Purgable (mg/l)	Extractable + Purgable < 1.0	Extractable + Purgable < 1.0	< 0.5 < 0.5	<0.5
Tetrachloroethene (TCE) (µg/)	5	5	< 1.0	< 1.0
Toluene (µg/)	100	100	< 1.0	< 1.0
Ethylbenzene (µg/)	100	100	< 1.0	< 1.0
Total Xylenes (µg/)	200	200	< 1.0	< 1.0
MTBE (µg/)	20	20	< 1.0	4.8
EPA Method 8260 Analytes (µg/)	Monitor & Report	Monitor & Report	Non Detect	Not Available

Receiving Water Characteristics:

The dewatering system discharges into the Lovelock stormdrain system, which eventually discharges to the Lovelock Drain, and to the Toulon Sink. Water quality monitoring data for the Toulon Drain, into which the Lovelock Drain flows prior to discharge to Toulon Sink, indicate the following: average TDS of 1809 mg/l; pH between 7.08 and 9.54 Standard Units; average Total Nitrogen of 1.73 mg/l. There are no water quality standards directly naming the Lovelock Drain, Toulon Drain, or Toulon Sink. These waters are typically considered part of the Humboldt River system, regulated by NAC 445A.127 (Class D Waters). Discharge is required to be administered by an NPDES permit.

Proposed Effluent Limitations and Special Conditions:

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	---	0.100	Continuous	Flow Meter
Total Petroleum Hydrocarbons (mg/l)	M&R	1	Monthly	Discrete
Benzene (µg/l)	M&R	5	Monthly	Discrete
Toluene (µg/l)	M&R	100	Monthly	Discrete
Ethylbenzene (µg/l)	M&R	100	Monthly	Discrete
Total Xylenes (µg/l)	M&R	200	Monthly	Discrete
Methyl Tertiary Butyl Ether (MTBE) (µg/l)	M&R	20	Monthly	Discrete
Total Dissolved Solids (mg/L)	M&R		Quarterly	Discrete
pH (Standard Units)	6.0 - 9.0		Quarterly	Discrete

Where: MGD: Million gallons per day.
mg/l: Milligrams per liter.

µg/l: Micrograms per liter.

M&R: Monitor and Report

Notes:

- a. Monitor and record total discharge flow via flow meter recorder weekly and report on a quarterly basis during the term of this permit.
- b. Samples must be collected, as nearly as possible, at the same time of day.

Rationale for Permit Requirements:

Water quality standards as prescribed in NAC 445A.120-123, 445A.127, and 445A.144-145 are used in part to define the discharge limits set herein by the permit. The flow limit has been set at the Permittee's request and is within the design capacity of the treatment system. The limits for Benzene, Toluene, Xylene, Ethylbenzene, Methyl Tertiary Butyl Ether (MTBE) and Total Petroleum Hydrocarbon (TPH) have been set at levels previously established by the Division for general use in discharge permits (Memo, "BTXE Limits for Remediation Projects", 1991). The Permittee is required to monitor discharge for TDS and pH to ensure that the receiving water is not degraded from dewatering and treatment at the site.

Schedule of Compliance:

The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications that the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. **By November 1, 2007**, the Permittee shall submit an Operations and Maintenance Manual **stamped by a Nevada licensed Professional Engineer** to the Division for review and approval. This document shall include all relevant sampling, maintenance and BMP (good housekeeping) procedures employed during the term of this permit. The O&M Manual shall be submitted for review to the following address:

Nevada Division of Environmental Protection
Bureau of Water Pollution Control
Compliance Branch
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701

Procedures for Public Comment:

The Notice of the Division's intent to issue the modified NPDES permit authorizing this facility to discharge into the Lovelock Drain, subject to the conditions contained within the permit, is being sent to the **Lovelock Review-Miner** and the **Reno Gazette Journal** for publication. The Notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **October 12, 2007 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to issue the proposed NPDES discharge permit as modified for the remainder of the five (5) years permit term, expiring on June 30, 2011.

Prepared by: Janine O. Hartley
Staff Engineer II
February 2006
Modified: July, 2007